

# United States Patent and Trademark Office

my

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,351 12/20/2001		Eric Nielsen	070191-0335 (112018)	8396
26371	26371 7590 03/08/2004		EXAMINER	
FOLEY & LARDNER 777 EAST WISCONSIN AVENUE SUITE 3800 MILWAUKEE, WI 53202-5308			GETZOW, SCOTT M	
			ART UNIT	PAPER NUMBER
			3762	2
		DATE MAILED: 03/08/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.    10/034,351		$\cdot$ , $\cdot$ , $\cdot$		$\mathbf{r}$ $\mathbf{r}$			
Examiner Scott M. Getzow Art Unit Scott M. Getzow Art Unit Art MAILING DATE of this communication appears on the cover sheet with the correspondence address Beriod for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION  Estatesians of time may be available under the previsions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after 31(a) (MONTH9 from the mailing date of the communication.  If the period for reply appendix above, the nearmous teaturey period will apply and will english (3) (A) (A) (A) (apply will be considered timely.  If the period for reply appendix above, the nearmous teaturey period will apply and will english (3) (A) (A) (A) (apply will be considered timely.  If the period for reply appendix above, the nearmous teaturey period will apply and will english (3) (A) (A) (A) (apply will be the considered timely.  If the period for reply appendix above, the nearmous teaturey period will apply and will english (3) (A) (A) (apply will be the considered timely.  If the period for reply appendix above, the nearmous teature period and the considered timely.  If the period for reply appendix above, the nearmous teature period and the considered timely.  If the period for reply appendix above, the nearmous teature period and the considered timely.  As period to reply appendix and the period of the communication, even if timely filed, may reduce any end of the communication.  Application accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-61 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-62 is/are pending in the application.  4a) Claim(s) 1-62 is/are pending in the application.  Claim(s) 1-13, 20-27, 3-3-36, 40-45 and 51-61 is/are rejected.  7) Claim(s) 1-14, 20-	•		Application No.	Applicant(s)			
Scott M. Cetzow 3762  The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Estanesion of time may be available under the provisions of 3 CFR 1.13(g). In no event, however, may a reply be timely filed after SK (6) MONTHS from the mailing date of this communication.  If the period for reply specified above, the mailing date of this communication.  If the period for reply specified above, the mailing date of this communication.  The mailing date of this communication after the mailing date of this communication.  The mailing date of this communication after the mailing date of this communication.  The mailing date of this communication after the mailing date of this communication, even if timely filed, may reduce any extend patient term adjustment. See 37 CFR 1.794(b).  Responsive to communication(s) filed on 12 December 2003.  2a) This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-61 [s/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-19,28-32 and 37-39 is/are allowed.  6) Claim(s) 1-19,20-27,33-36,40-45 and 51-61 [s/are rejected.  7) Claim(s) 46-50 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Application Papers  9) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  11) The drawing sheet(s) including the correction is required if the drawi	<b>≜</b> ;		10/034,351	NIELSEN ET AL.			
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION.  - set the provided of the set of	Offic Action Summary		Examiner	Art Unit			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filled arter 51% (b) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thinty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely.  - If the period for reply specified above is less than thinty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely.  - If the period for reply specified above is less than thinty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely.  - If the period for reply specified above is less than thinty (30) days, a reply within the statutory minimum of thinty (30) days will be considered timely.  - Failus to reply within the set or evaluated period for reply will, by statutor, and the specified of the communication.  - Failus to reply within the sate or evaluated period for reply will, by statutor, even if timely filed, may reduce any earned parter than adjustment. See 37 CFR 1.704(b).  - Status  1) □ Responsive to communication(s) filled on 12 December 2003.  2a) □ This action is FINAL.  2b) □ This action is non-final.  3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) □ Claim(s) 1-61 is/are pending in the application.  4a) □ Claim(s) 1-61 is/are pending in the application.  4a) □ Claim(s) 1-61 is/are pending in the application.  4a) □ Claim(s) 1-19.28-32 and 37-39 is/are allowed.  □ Claim(s) 1-19.28-32 end 37-39 is/are allowed.  □ Claim(s) 1-19.28-32 end 37-39 is/are allowed.  □ Claim(s) 1-19.20-27, 33-36, 40-45 and 51-61 is/are rejected.  □ Claim(s) 1-19.20-27, 33-36, 40-45 and 51-61 is/are reje				1			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  Edensinos of time may be variable under the provisions of 3 CFR 1.135(a). In no event, however, may a reply be timely filled offer SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thin; (30) days, a reply within the studeny minimum of thin; (70) days, a reply within the studeny minimum of thin; (30) days, a reply within the studeny minimum of thin; (30) days, a reply within the studeny minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, or ill days and the studenty minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, a reply within the studenty minimum of thin; (30) days, and the studenty minimum of the studenty minimum of the studenty minimum of the students of the st			pears on the cover sheet with the	correspondence address			
1)  Responsive to communication(s) filed on 12 December 2003.  2a)  This action is FINAL. 2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-61 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 14-19.28-32 and 37-39 is/are allowed.  6) Claim(s) 14-19.28-32 and 37-39 is/are allowed.  7) Claim(s) 46-50 is/are objected to.  8) Claim(s) 46-50 is/are objected to.  8) Claim(s) 1-13.20-27.33-36.40-45 and 51-61 is/are rejected.  7) Claim(s) 46-50 is/are objected to.  8) Claim(s) 1-13 20-27 is/are allowed.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in Application No	A SH THE - Exte after - If the - If NC - Failu Any	MAILING DATE OF THIS COMMUNICATION.  Insions of time may be available under the provisions of 37 CFR 1.1  SIX (6) MONTHS from the mailing date of this communication.  In period for reply specified above is less than thirty (30) days, a reple of the period for reply is specified above, the maximum statutory period of the torus of the period for reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing	136(a). In no event, however, may a reply be a ly within the statutory minimum of thirty (30) do will apply and will expire SIX (6) MONTHS fro e, cause the application to become ABANDON	timely filed  ays will be considered timely.  m the mailing date of this communication.  IED (35 U.S.C. § 133).			
2a) This action is FINAL. 2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-61 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) 1-19,28-32 and 37-39 is/are allowed.  6) Claim(s) 1-13,20-27,33-36,40-45 and 51-61 is/are rejected.  7) Claim(s) 46-50 is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	Status						
4) ☐ Claim(s) 1-61 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) 14-19,28-32 and 37-39 is/are allowed. 6) ☐ Claim(s) 1-13,20-27,33-36,40-45 and 51-61 is/are rejected. 7) ☐ Claim(s) 46-50 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) ☐ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This Since this application is in condition for allowa	s action is non-final. nce except for formal matters, p				
4a) Of the above claim(s) is/are withdrawn from consideration.  5) □ Claim(s) 14-19,28-32 and 37-39 is/are allowed.  6) □ Claim(s) 1-13,20-27,33-36,40-45 and 51-61 is/are rejected.  7) □ Claim(s) 46-50 is/are objected to.  8) □ Claim(s) are subject to restriction and/or election requirement.  Application Papers  9) □ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received.  2. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	Disposit	ion of Claims					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	5)⊠ 6)⊠ 7)⊠ 8)□ Applicat	4a) Of the above claim(s) is/are withdraw Claim(s) <u>14-19,28-32 and 37-39</u> is/are allowed Claim(s) <u>1-13,20-27,33-36,40-45 and 51-61</u> is/Claim(s) <u>46-50</u> is/are objected to. Claim(s) are subject to restriction and/original control of the control of t	wn from consideration.  d.  /are rejected.  or election requirement.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	וטונייו						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).	11)	Replacement drawing sheet(s) including the correct	tion is required if the drawing(s) is o	bjected to. See 37 CFR 1.121(d).			
<ul> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>	Priority (	under 35 U.S.C. § 119					
* See the attached detailed Office action for a list of the certified copies not received.	а)	<ul> <li>□ All b) □ Some * c) □ None of:</li> <li>1. □ Certified copies of the priority document</li> <li>2. □ Certified copies of the priority document</li> <li>3. □ Copies of the certified copies of the priority application from the International Burear</li> </ul>	ts have been received. ts have been received in Applica crity documents have been recei u (PCT Rule 17.2(a)).	ition No ved in this National Stage			
Attachment(s)		• •	_				
1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 10.  4) Interview Summary (PTO-413)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  6) Other:	2) 🔲 Notic 3) 🔯 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail 5)  Notice of Informal	Date			

## Claim Rejections - 35 USC § 103

1. Claims 1-7,20,40,41,54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al '917 in view of Raj et al '013.

Wang teaches all of the subject matter of the above claims including displaying non-invasively determined cardiac output and Ecg, see column 7 lines 60-66. However, the patent does not explicitly state that a plurality of ECG waveforms is displayed. Raj teaches an Ecg monitor which displays, among other things, a plurality of Ecg signals. It would have been obvious to use such a display feature of Raj with the device of Wang in order to give the attending physician a more complete indication of a patient's health.

2. Claims 8,9,10,12,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al '917 and Raj et al '013 and further in view of Maschke '012.

The combination of Wang and Raj, as mentioned above, shows a device that displays a plurality of Ecg signals as well as cardiac output. The combination does not explicitly teach use and display of blood pressure, pulse oximetry and carbon dioxide. These parameters are sensed and displayed with the device of Maschke. It would have been obvious to use such parameters with the combination of Wang and Raj in order to give the attending physician a more complete picture of the health of the patient.

1

3. Claims 21-24,26,27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al '917 in view of Welch et al '363.

Wang teaches all of the subject matter of the above claims except the explicit mention of a wireless communication link between the monitoring system and a LAN. Welch teaches the use of wireless communication which allows for communication of information and data to a centralized location, such as an LAN including a nurse's station. To use such wireless technology with the device of Wang would have been obvious in that it would provide portability to expand the freedom of movement of the patient.

4. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al '917 and Welch et al '363 and further in view of Maschke et al '012.

The combination of Wang and Welch teaches all of the subject matter of the above claims except the explicit mention of using blood pressure, pulse oximetry and carbon dioxide sensors. As mentioned above, Maschke teaches using such sensors in a patient monitoring system. It would have been obvious to use such sensors with the device of Wang and Welch in order to give the attending physician a more complete picture of the patient's condition.

5. Claims 11,33-36,42-45,54,55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al '917 and Raj et al '013 and further in view of Welch et al '363.

The combination of Wang and Raj teaches all of the subject matter of the above claims including displaying a plurality of Ecg signals of a patient, except the use of a communication interface that allows for wireless communication between the monitoring system and a LAN. As mentioned above, Welch teaches the use of wireless technology in a patient monitoring environment. It would have been obvious to use such technology with the device of Wang and Raj in order to increase the range of movement of the patient in the hospital without tangling wires.

6. Claims 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Solar 7000/8000 Patient Monitor Operator's Manual in view of Welch et al '363.

It would have been obvious to use wireless technology, as shown by Welch, with the Solar device, for reasons mentioned supra.

# Claim Rejections - 35 USC § 102

7. Claims 11,21-27,51-61 are rejected under 35 U.S.C. 102(a) as being anticipated by Solar 7000/8000 Patient Monitor Operator's Manual.

## Allowable Subject Matter

8. Claims 14-19,28-32,37-39 are allowed.

9. Claims 46-50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott M. Getzow whose telephone number is (703) 308-2997. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Scott M. Getzow Primary Examiner Art Unit 3762

smg